



PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN THE APPLICATION OF:

FRANK P. UCKERT ET. AL.

CASE NO.: PE0667USDIV1

APPLICATION NO.: 10/809,142

CONFIRMATION NO.: 7398

GROUP ART UNIT: 1714

EXAMINER: UNKNOWN

FILED: MARCH 25, 2004

FOR: ELECTROACTIVE FLUORENE COPOLYMERS AND DEVICES MADE WITH  
SUCH POLYMERS

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information listed on the enclosed PTO/SB/08. A copy of the information is also enclosed.

Benefit of the earlier filing date of U.S. Patent Application No. 10/137,898, filed May 2, 2002 is claimed under 35 U.S.C. 120 for the above-referenced application and only copies of information not previously made of record in the parent are enclosed.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

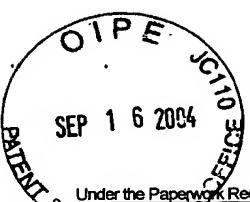
Respectfully submitted,

MARY ANN CAPRIA  
ATTORNEY FOR APPLICANTS  
Registration No.: 32,659  
Telephone: (302) 992-3749  
Facsimile: (302) 892-7949

Dated: 9/14/2004

Enclosures

**BEST AVAILABLE COPY**



EP 1 6 2004

PTO/SB/08A (08-03)

Approved for use through 07/31/2006, OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

~~Substitute for form 1040A/PFO~~

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

Shee

1 of 2

*Complete if Known*

Application Number	10/809,142
Filing Date	March 25, 2004
First Named Inventor	Frank P. Uckert et al.
Group Art Unit	1714
Examiner Name	Unknown

Shee

1 | of | 2

Attorney Docket Number | PE0667USDM1

## **U.S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/809,142		
(use as many sheets as necessary)		Filing Date	March 25, 2004		
Sheet	2	First Named Inventor	Frank P. Uckert et al.		
		Group Art Unit	1714		
		Examiner Name	Unknown		
		Attorney Docket Number	PE0667USDIV1		

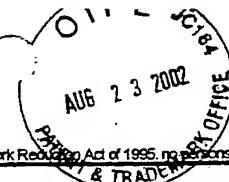
<b>OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS</b>						
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T <sup>2</sup>
		DE 19846767, Partially conjugated polymer useful as an organic semiconductor or an electroluminescence material, and for display elements in television monitor and illumination technology contains fluorene building units, Abstract, 06-13-2000, Aventis Res & Technologies GmbH				<input type="checkbox"/>
		JP 2000319272, (Diaryl amino) furan analogues with improved stability, useful pharmaceutical intermediates and electron hole transport or photosensitive materials, Abstract, 04-21-2001, Tosoh Corp				<input type="checkbox"/>
		JP 08157575, Carrier transport polymers – useful as carrier transport materials in organic thin film electroluminescence devices, Abstract, 10-25-1996, Toppan Printing Co. Ltd.				<input type="checkbox"/>
		JP 2000143778, Display element such as cathode ray tube and light emitting diode, comprises specified light emitting compound as color developing materials, Abstract, 10-06-2000, Samsung Denkan KK				<input type="checkbox"/>
		JP 10273522, Production of phenylene group-containing copolymers – comprises copolymerizing phenylene group-containing compounds in presence of catalysts containing transition metal compounds, Abstract, 01-13-1999, Nippon Gosei Gomu KK				<input type="checkbox"/>
		JP 10273521, Production of phenylene group-containing copolymers – comprises copolymerizing phenylene group-containing compounds in presence of catalysts containing transition metal compounds, Abstract, 12-23-1999, Nippon Gosei Gomu KK				<input type="checkbox"/>
		JP 03028220, Electrochromic elements for display or optical shield glass – contg. film of polyphenylene polymer derived from fluorene, Abstract, 09-28-1993, Idemitsu Kosan Co. Ltd.				<input type="checkbox"/>
		JP 03017120, Polyphenylene polymers used as conductive material or display material are produced by chemical or electrochemical-oxidative polymerizing of specified fluorene derivs, Abstract, 09-28-1993, Idemitsu Kosan Co. Ltd.				<input type="checkbox"/>
		JP 02269734, New polyphenylene-type polymer prep'd. By oxidn. Polymerization of fluorene derive., Abstract, 09-28-1993, Idemitsu Kosan Co. Ltd.				<input type="checkbox"/>
		KR 99057430, Fluorene-based alternating statistical copolymer containing multi-luminescence groups and electroluminescence device using the same, Abstract, 07-15-1999, Korea Adv Inst Sci & Technology				<input type="checkbox"/>
						<input type="checkbox"/>

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

~~Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.~~

Substitute for form 1449A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sh

of

<i><b>Complete if Known</b></i>	
Application Number	10/137,898
Filing Date	MAY 2, 2002
First Named Inventor	FRANK P. UCKERT ET AL.
Group Art Unit	1711
Examiner Name	UNKNOWN
Attorney Docket Number	PE0667 US NA

U.S. PATENT DOCUMENTS

**RECEIVED**

AUG 26 2002

**TC 1700**

RECEIVED  
SEP -5 2001  
TO 1700 MAIL ROOM

## **FOREIGN PATENT DOCUMENTS**

**Examiner  
Signature**



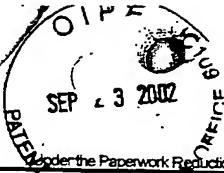
Date Considered

0109104

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
I respond to a collection of information unless it contains a valid OMB control number.

~~Substitute for form 14 SEPTEMBER~~

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

sh

— 1 —

<i>Complete If Known</i>	
Application Number	10/137,898
Filing Date	MAY 2, 2002
First Named Inventor	FRANK P. UCKERT ET AL.
Group Art Unit	1711
Examiner Name	UNKNOWN
Attorney Docket Number	PE0667 US NA

**U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

**RECEIVED**

SEP 26 2002

TC 1700

Examiner  
Signature



Date  
Considered

61/09/04

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<b>Notice of References Cited</b>	Application/Control No.	Applicant(s)/Patent Under Reexam	
	10/137,898	Uckert et al.	
Examiner Ling-Siu Choi	Art Unit 1713	Page 1 of 1	

**U.S. PATENT DOCUMENTS**

	Document Number Country Code-Number-Kind Code	Date MM-YYYY <sup>1</sup>	Name	Classification <sup>2</sup>	
A	5,621,131	4/1997	Kreuder et al.	558	46
B	5,962,631	10/1999	Woo et al.	528	397
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					

**FOREIGN PATENT DOCUMENTS**

	Document Number Country Code-Number-Kind Code	Date MM-YYYY <sup>1</sup>	Country	Name	Classification <sup>2</sup>
N					
O					
P					
Q					
R					
S					
T					

**NON-PATENT DOCUMENTS**

	Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages Miller et al., Nonlinear Optics, 20, 269-295(1999).
U	
V	
W	
X	

\* A copy of this reference is not being furnished with this Office action. See MPEP § 707.05(a).

<sup>1</sup>Dates in MM-YYYY format are publication dates.

<sup>2</sup>Classifications may be U.S. or foreign.

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

**BLACK BORDERS**

**IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

**FADED TEXT OR DRAWING**

**BLURRED OR ILLEGIBLE TEXT OR DRAWING**

**SKEWED/SLANTED IMAGES**

**COLOR OR BLACK AND WHITE PHOTOGRAPHS**

**GRAY SCALE DOCUMENTS**

**LINES OR MARKS ON ORIGINAL DOCUMENT**

**REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

**OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**